

CLAIMS

1. A laser-weldable resin label which comprises at least a resin layer and is affixable to a resin shaped article by a laser welding, wherein the resin layer has a light-scattering property, and the transmittance of the resin layer relative to a laser beam having an oscillation wavelength within the range of 740 to 1100 nm is not less than 20%, the total light transmittance of the resin layer relative to a visible light in accordance with ASTM D1003 is not more than 50%, and the haze value of the resin layer in accordance with ASTM D1003 is not less than 70%.

2. A laser-weldable label according to claim 1, which has a thickness of 50  $\mu$ m to 5 mm.

3. A laser-weldable label according to claim 1, wherein the resin layer comprises a thermoplastic resin.

4. A laser-weldable label according to claim 1, which comprises the resin layer alone.

5. A laser-weldable label according to claim 1, wherein the resin layer comprises a thermoplastic resin which has a compatibility with a resin constituting the resin shaped article.

6. A laser-weldable label according to claim 1, wherein the resin layer is capable of masking the resin shaped article, and is colored into a chromatic color or an achromatic color.

7. A laser-weldable label according to claim 1,

which comprises a printed layer formed on the surface thereof, wherein the printed layer has a display function.

8. A laser-weldable label according to claim 7, wherein the printed layer comprises a coloring agent having  
5 a transmitting property relative to a laser beam.

9. A laser-weldable label according to claim 1, which comprises the resin layer and a laser-absorbing part formed on a surface of the resin layer, wherein the label is weldable to the resin shaped article by irradiating a  
10 laser beam on a contact surface of the laser-absorbing part with the resin shaped article.

10. A laser-weldable label according to claim 9, wherein the absorbing part is a laser-absorbing layer which is formed on a surface of the resin layer, and the thickness  
15 of the absorbing layer is 1 to 40  $\mu\text{m}$ .

11. A laser-weldable label according to claim 9 or 10, wherein the absorbing part is a laser-absorbing layer formed by a layer containing a laser beam absorbent.

12. A shaped composite article which comprises a  
20 resin shaped article and a laser-weldable label recited in any one of claims 1 to 11, wherein the label is bonded to the resin shaped article by a laser welding.

13. A shaped composite article according to claim 12, wherein the resin shaped article comprises a laser  
25 beam-absorbing part formed on at least part of a surface thereof, and the label is bonded to the resin shaped article by irradiating a laser beam on the contact surface of the

absorbing part with the label.

14. A shaped composite article according to claim 13, wherein the absorbing part comprises a laser-absorbing layer, and the thickness of the absorbing layer is 1 to 5 40  $\mu\text{m}$ .

15. A shaped composite article according to claim 13 or 14, wherein the absorbing part comprises a laser-absorbing layer, and the absorbing layer is formed from a layer containing a laser beam absorbent.

10 16. A shaped composite article according to any one of claims 12 to 15, wherein the resin shaped article is a toner cartridge.